



**U.S. Department of
Transportation**

Office of the Secretary
of Transportation

GENERAL COUNSEL

400 Seventh St., S.W.
Washington, D.C. 20590

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FEDERAL COMMUNICATIONS COMMISSION
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April 12, 2001

Ms. Magalie R. Salas
Secretary, Federal Communications Commission
The Portals
445 12th Street, S.W. TW-A325
Washington, D.C. 20554

Re: Petition for Allocation of N11 Telephone Number for ATIS
CC Dkt. No. 92-105
NSD File No. L-99-24

Dear Ms. Salas:

Enclosed herewith are the original and eleven copies of the Comments of the U.S. Department of Transportation on Petitions for Reconsideration in the above-referenced proceeding. I have also enclosed an additional copy, which I ask that you date-stamp and return to the messenger.

Thank you for your assistance in this matter.

Sincerely,

Paul Samuel Smith
Senior Trial Attorney
(202) 366-9285

Enclosures

cc: Petitioners
Cheryl Callahan,
Network Services Division (w/ attachments)

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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OFFICE OF THE SECRETARY

In the Matter of:

Petition by the United States Department of
Transportation for Assignment of an
Abbreviated Dialing Code (N11) to Access
Intelligent Transportation System (ITS)
Services Nationwide

CC Dkt. No. 92-105
NSD File No. L-99-24

COMMENTS OF THE
UNITED STATES DEPARTMENT OF TRANSPORTATION
ON PETITIONS FOR RECONSIDERATION

Paul Samuel Smith
Senior Trial Counsel
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590
(202) 366-9285

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SUMMARY

Several wireless telephone carriers have petitioned the Federal Communications Commission to reconsider its decision assigning 511 nationwide for use in accessing advanced traveler information services. The United States Department of Transportation believes that several of the major substantive objections are based, at least in part, on basic misunderstandings. Perhaps the most important of these concerns the structures and processes by which transportation projects, including travel information services, are coordinated among public and private sector entities. There is also an apparent misunderstanding concerning the extent of the information services that state and local government transportation agencies are seeking to make available to the public. We wish to offer clarification of these matters in the interest of eliminating or at least reducing the opposition expressed in the petitions.

I. Introduction

The fundamental purpose of the United States Department of Transportation ("Department" or "DOT") in petitioning for the assignment of an abbreviated dialing code for the advanced traveler information system ("ATIS") was to improve the safety and efficiency of the nation's transportation system. Such a code would maximize the use of these systems, and hence their benefits, by simplifying access. The Federal Communications Commission ("Commission" or "FCC") made a significant contribution toward this goal by allocating 511 on a national basis. Third Report and Order and Order on Reconsideration (July 31, 2000), *summarized*, 66 Fed. Reg. 9674 (February 9, 2001) ("TRO").

Petitions for reconsideration of the FCC's decision have been filed by much of the commercial mobile radio services ("CMRS") industry, the providers of wireless telephony services. They raise various procedural and substantive arguments that, in essence, seek to exempt the wireless telephone industry from this decision. Given the ubiquity of wireless telephones, especially among travelers, such a result would severely undercut the deployment and use of ATIS, and thus the public benefits, of the Commission's original assignment. DOT would clearly oppose this outcome.

Fortunately, from the Department's perspective it appears that the petitions are largely based on a misunderstanding of the nature of government coordination in the field of transportation generally and with respect to information systems in particular, and of the very real opportunity for wireless carriers and others to compete in the dissemination

of travel-related information. A proper understanding of these matters demonstrates the advisability of the flexibility reflected in our petition and permitted by the FCC's decision. DOT therefore seeks to offer additional clarification through these comments, and to apprise all parties of the steps we have already taken to extend the cooperative process to 511. The Department accordingly requests that the Commission affirm its decision.

DISCUSSION

II. Background Information

The petitioners raise three main arguments that the Department wishes to address: the prospect of conflicting demands for use of the 511 code; the perceived government monopoly on travel information services that the FCC order allegedly bestows; and the lack of guidance in the FCC's order on technical and financial issues. Before turning to these issues, however, it is necessary to describe more precisely the nature of the ATIS network that the Commission has advanced and, perhaps most important, the governmental environment within which transportation systems are built and operate, information services are offered, and private entities participate.

A. Deployment of ITS Technologies

ATIS is a component of the Department's Intelligent Transportation System ("ITS") program. *See* Petition for Rulemaking of the U.S. Department of Transportation, filed March 8, 1999, at 3. Broadly speaking, the ITS program is a multi-faceted effort to maximize the benefit of the existing transportation infrastructure through technology. This encompasses everything from automatic toll systems to computerized signage to vehicles that inform the driver of approaching hazards. The Commission is well aware of many of these initiatives, because their dependence on wireless communications has led DOT to the FCC repeatedly to explain their merit and seek assistance. *See, e.g., Id.* at 14.

Like all ITS initiatives, ATIS is voluntary. DOT provides research, financial support, and other assistance for developing and deploying promising technologies. We share Congress' belief that ITS can enhance safety, ease congestion, reduce pollution and fuel consumption, and advance efficiency -- all without the traditional dependence on simply building or enlarging roads. *Id.* at 8-10. Large numbers of states and localities, hardware and software suppliers, vehicle manufacturers and operators, all agree. To the extent that they adopt ITS applications, the public and private benefits of ITS will multiply. That is the real synergy of the ITS program. *Id.* at 10-20.

But the federal government does not mandate the use of these technologies. DOT has not required that any state or locality install sensors in pavement, activate traffic cameras in strategic locations, or take any other steps necessary to gather accurate information on traffic and/or weather/roadway conditions.¹ The large majority of states

¹/ Indeed, whether a local government collects this data naturally depends on the extent to which the community has a traffic problem.

and many local governments have done so simply because these are the entities in our country that are responsible for safe and efficient transportation within their spheres, and because they recognize that various ITS projects help them to fulfill that obligation. They build and maintain the roads. They train and outfit police, fire, and rescue units. Over time, they have come to appreciate the value of information on traffic and related conditions. *See* Appendix A to TRO. It is also true that some come to that awareness sooner than others.

Just as there is no overarching federal demand that any or all communities provide this information to travelers in the first place, so, too, is there no one required arrangement in which all public and private sectors must participate in order to produce and disseminate this information. There are a variety of means by which the data can be collected and a number of entities in position to do it. The technical and financial terms of these arrangements are particular to the parties and circumstances involved. In working with state and local governments for decades in the construction and maintenance of the interstate highway system and, more recently, on different ITS projects, the Department has learned that state and local agencies vary widely in their structure, in the degree of autonomy that they enjoy, and in the resources that they bring to bear. *See* Reply Comments of the U.S. Department of Transportation, filed August 20, 1999, *passim*.

This, then, is the backdrop against which the Department's petition and the Commission's decision must be understood. DOT sought, and the FCC granted, significant discretion in the deployment of the 511 code and the information systems to which it will provide access. The environment noted above (and outlined further below)

effectively requires flexibility to adapt to the vagaries of a system that can be quite individualistic in some of the particulars by which it functions. As will be discussed herein, the Department has taken concrete steps since release of the FCC's decision last July to introduce the use of 511 to the many transportation agencies that will be concerned with its implementation, and to promote coordinated, consistent nationwide implementation.

B. Government Coordination in the Field of Transportation

What is important to the individual traveler is transparency, so that useful, highly accurate data on traffic and related information is provided wherever 511 is operational. What is important to the traveling public at large, and to transportation agencies, is the expansion of the availability of 511 to access this information. There are structures and processes in place to secure both of these ends. The Commission's order grants the 511 code to state and local governments, and rightly so for the reasons explained above.² The petitioners correctly assert that there are numerous government entities in every region that could potentially be applicants for 511. *See* Petitions of Verizon Wireless at 19-20; SBC Communications at 2; Cellular Telecommunications and Internet Association ("CTIA") at 6; Qwest International Corp. at 4. This possibility exists because of the organization of transportation agencies at state, local, and regional levels. The success of the coordination processes employed by these entities on transportation matters,

^{2/} *I.e.*, that these entities are responsible for safe and efficient transportation, and that they work together with private sector parties to fulfill that obligation. *See* U.S. DOT Reply Comments.

including traffic information systems, suggests that the concern over conflicting demands from different government agencies is often theoretical.

The states are recipients of the federal highway and transit aid appropriated by Congress and administered by DOT. Further, states are responsible for the interstate highway system and state roads. State departments of transportation therefore play a significant role in the planning and operation of the country's transportation network.

In addition, there are 343 Metropolitan Statistical Areas in the U.S. Each of these is required by federal law to have a Metropolitan Planning Organization ("MPO"), whose central function is to bring together and coordinate the various political jurisdictions and transportation agencies within the metropolitan area for the purpose of planning all transportation facilities, infrastructure, and projects within the area. *See* 23 U.S.C. §§ 134, 135, 315; 23 C.F.R. Part 450. To accomplish this objective, the MPO serves as a forum for the discussion of transportation issues in the region and as a conduit for the Transportation Improvement Program, or "TIP," for that region. TIPs cover the transportation infrastructure projects envisioned for a particular area over a five-year period. They are reviewed by FHWA. Further, the MPO transportation plans must be coordinated with the State's Transportation Improvement Program, or "STIP."

The coordination of transportation plans can thus be quite involved. Despite the fact that perfect cooperation does not exist, the shared interests of the participants has historically enabled each state and the relevant political subdivisions to implement projects within their areas for the benefit of the traveling public. It is through this governmental structure and the coordination that it entails that inter-jurisdictional roadway systems and existing traffic information services have come about. Specific

examples already in the record and outlined below give confidence that these processes should generally prove up to the incremental task of cooperating in the use of 511.

III. Petitioners' Concerns

A. Traffic Information and Monopoly

Petitioners have charged that by its decision the Commission has granted a monopoly on travel-related information to state and local governments and has thereby reduced competition among wireless carriers. *See* Petitions of Verizon Wireless at 17-19; CTIA at 7; Sprint Spectrum, L.P. at 7-10. Again DOT trusts that a more complete understanding of ATIS and the roles available to the private sector in providing information to the traveling public will mute the opposition.

Traffic and road condition data is now collected and made available from a number of sources, usually related to the manner in which state and local governments operate the transportation network. A state that has invested in the infrastructure (e.g., pavement sensors or traffic cameras) to obtain the data necessary for high quality information usually has at least one Transportation Management Center ("TMC"), essentially a "control room" where data from the roadways is routed for use in the management function. It is these TMC's, or hubs of data collection, that are the generators of the basic information needed to develop accurate travel condition reports. In each metropolitan area within a state, there is typically another TMC that collects transportation data specifically for that area. This TMC usually encompasses a number of political jurisdictions to facilitate the coordination of the transportation network in the

metropolitan area overall. In general, outside the boundaries of the metropolitan TMC, the State TMC assumes that role.

Concrete examples abound. In the San Francisco Bay area, the Metropolitan Transportation Commission is the MPO, operates the TMC, and has taken the lead to provide traveler information in the region. The Metropolitan Transportation Commission encompasses a nine county area with one hundred and one cities, twenty-seven transit agencies; it serves six-and-a-half million people. The Metropolitan Transportation Commission uses a private contractor to operate its TMC. That contractor collects data and makes it available for use by a variety of media, including both wireline and wireless telephone. Los Angeles has its own TMC. Outside of such metropolitan areas, the California State Department of Transportation ("Caltrans") has this responsibility. Caltrans recognizes the Metropolitan Transportation Commission as the agency responsible for providing traffic and transit information in the Bay area. Caltrans has sponsored two statewide workshops to coordinate implementation of 511 and to address any conflicts which might arise. Both public and private sector organizations, including telecommunications providers, have participated in these workshops.

Locally, Washington, D.C. offers another illustration with which many are familiar. The Washington TMC encompasses twenty-six political jurisdictions, including two states and the federal district, that have organized to present a single body or contact to the communication media for the purpose of providing quality information to the traveling public.

The information collected and disseminated through ATIS also reflects its general source. This information concerns traffic density and speeds, lane closures, accidents and

incidents, the presence of liquid or frozen precipitation on road surface, and the like. Such data are essential to “real time” traffic management, dispatch of police or emergency units, maintenance crews, etc. They can also assist travelers avoid congestion, unsafe conditions or areas, and unproductive expenditures of fuel and time. That is why state and local governments (and sometimes others) acquire the information and distribute it to the public via multiple media in an effort to ensure the broadest possible use – such as the internet, television, electronic signage, and the telephone.

This core information on traffic and related conditions is the focus of state and local governments because it enables them to carry out their underlying transportation responsibilities. They generally wish to see it distributed more widely, however, and hence support the expanded use that the 511 code promises. The CMRS industry is integral to that expansion to reach travelers around the country.

By contrast, it is the Department’s understanding that wireless carriers may offer a much broader array of information on subjects that is of potential interest to travelers, but is not directly related to traffic and roadway/weather conditions. An example from the internet web site of AT&T Wireless, referenced by CTIA in discussions with DOT, should suffice to illustrate the kinds of data that public transportation entities do not control and have no wish to prevent any carrier from offering to its customers.

Travel Services

Flight Info

Ground Transportation

Directions - - - - - Map Quest - - - - - Directions

Things To Do

Traffic Station

Biz Locator

IQ Radio

Yellow Pages

Traffic - - - -

What City

Zagat Restaurants

Washington

Weather

- - - Accidents

City Connect

- - - Construction

Movies

- - - Delays

Vicinity

- - - Other

This is certainly not to suggest that all wireless carriers would offer all such services or arrange them in such a fashion. It is to underscore (1) that the type of information that transportation authorities are concerned with is a small subset of the information that others may be interested in providing, and (2) that the core data set of central interest to facilitating safe and efficient transportation may be offered in an undifferentiated fashion and may require additional time to extract from a larger universe of information. DOT did not seek an abbreviated dialing code for convenience or concierge-type information. We question whether the public interest standard required for the assignment of these codes would have been satisfied if we had. Our point here is that core information should be the primary focus for any implementation of 511. The Department has taken steps with other transportation agencies to try and ensure that this is the case.

All of the preceding is by way of explaining several fundamental points: First, that access to and use of the 511 code must be coordinated to ensure that a certain core

traffic “information set” is conveyed wherever ATIS is accessed;³ second, that, in addition to confidence in the accuracy of this core information set, the public transportation sector has an inherent interest in disseminating it as broadly as possible; and third, that the media involved in this distribution may well also be able offer whatever other information (travel-related or otherwise) that they wish.

In sum, public agencies focus on a finite subset of traffic and road condition information. They are not concerned with other types of more diffuse travel-related information with which wireless carriers and others supplement their basic communications services. Airline flight data, theater offerings, food and lodging availability, etc., are not matters of programmatic interest to transportation agencies. Although they may recognize its value to wireless carriers and others as a competitive service offering, they do not seek to provide it or to prevent its dissemination. There is no government monopoly of any information; only a shared recognition of the need to coordinate access to 511 and to develop a standard set of core information offerings. Telecommunications companies can, do, and will participate in disseminating this and other information that they deem appropriate.

B. Technical and Financial Guidance

Multiple petitioners take issue with the absence of detailed guidance in the Commission’s decision on financial and technical questions, such as the routing of wireless calls, roaming charges, and so forth. *See* Petitions of Qwest International at 4 ;

^{3/} This is not to suggest that the same information is of equal importance everywhere in the country, or that it would be required to be collected and disseminated everywhere in the country, or that it could not be supplemented with additional information.

CTIA at 6 ; Verizon Wireless at 10-16. ⁴ They consider it necessary to resolve such issues at the outset. DOT does not share this view. We support the FCC's decision, and we offer additional clarification herein to explain why significant freedom on these issues for both telecommunications companies and government entities is important. Flexibility to accommodate different public and private structures, limits, incentives, and resources, and the success that flexible approaches have engendered thus far in producing travel information systems despite access difficulties, counsel against more prescriptive measures.

An important part of the wireless industry's concern seems to stem from the fact that the carriers' networks do not align with political boundaries. *See* petition of Qwest International at 3. There is no question that the routing of calls consistent with the caller's location is very different and more difficult in the wireless environment. But that is an obstacle that has been overcome in several areas of the country without specific directives from the FCC. It is also a subject being addressed by the "511 Policy Committee," one of the Department's initiatives discussed *infra*.

An abbreviated dialing code (#211) currently provides access to travel information in the metropolitan areas of Washington D.C., Minneapolis, and

⁴/ SBC Communications requests clarification of the FCC's apparent anticipation that there will be no "additional charge" to those who call 511. TRO at ¶ 2. DOT's petition intentionally did not specify whether there would or should be fees imposed on callers to 511. We believe that, like existing systems in widely dispersed regions, it is highly likely that those who seek information through the 511 code will not generally face an additional charge. We also recognize that we cannot foresee every circumstance and that it is possible that in some areas or for some purposes a fee may be levied. DOT believes that to foreclose this *ab initio* could hinder development and deployment of this valuable resource.

Philadelphia. The Cincinnati/northern Kentucky area uses 211 for the same purpose.⁵

In each of these cities there are several wireless carriers that have dealt with multiple government transportation agencies and they have together implemented the service.⁶

In each case the boundaries of that service are determined by the coverage characteristics of the cellular carriers in the area and not the borders of any political jurisdiction.

Financial issues have been resolved the same way. The travel information accessed via 211 in the Cincinnati area comes from a private sector firm that has contracted with and is paid by the Kentucky and Ohio state departments of transportation to collect and make available the data. Similarly, these two state agencies have negotiated fees and rates with the local wireline and wireless telecommunications providers. The same is generally true for the Washington, D. C. and Philadelphia areas. There are other sources of relevant (but in our view, inferior) traffic and roadway information that are available, on different terms, to the different media (e.g., internet, radio, and wireless and wireline telephones) to which travelers may turn. Financial arrangements are very much market-driven, and different localities present different situations that both governments and private sector companies should be free to respond to in their negotiations for the use of 511.

There is thus substantial evidence that the lack of more detailed directives from the FCC has not hamstrung wireless communications companies and multi-jurisdictional

⁵ / While the use of a vertical service code like #211 is not the same as a 511 designation, these implementations do illustrate that, while the problem of routing may be difficult, it is by no means insurmountable.

⁶ / Currently, there are six cellular carriers in the Cincinnati region that provide 211 travel information service: Sprint PCS, Nextel, GTE Wireless, AT&T Wireless/Cincinnati Bell Wireless, Ameritech/Cingular, and AirTouch/Verizon.

communities from setting up travel information systems that stretch across geopolitical borders. DOT submits that the ability of the parties to be flexible, to tailor the terms of their relationships has in fact been beneficial bringing about these systems in the face of a variety of circumstances that are found in different locales.

IV. The Department's Facilitation Efforts

The Department has been aware of the types of concerns expressed by the petitioners for some time. To address them, to advance this component of our ITS program, and to be responsive to the Commission's request that DOT "facilitate ubiquitous deployment" of 511 access across the country (TRO at ¶ 15), shortly after release of the FCC's decision we began several different initiatives. The first of these is a grant program that allocates a total of \$5 million (\$100,000 per state) to assist state and local governments in the planning and coordination that is required to implement 511 efficiently. This financial assistance offers a starting point that transportation agencies can use, and supplement with their own resources, to begin to extend their existing coordination activities to this new subject matter.⁷ It is specifically intended to help these agencies designate a single contact within metropolitan and similar areas for telecommunications carriers, and thereby avoid conflicts in the assignment of 511. The

^{7/} The small size of the amount is deceiving. It is simply an additional sum earmarked for a specific purpose that is directed to government entities that, as noted, have been in place for decades performing similar coordination and planning functions. An incremental grant for an incremental function, in other words.

Department considers that resolution of this potential problem is ultimately the responsibility of the members of the transportation community.

DOT has also published a "511 Implementation Guide" aimed at state and local transportation agencies that addresses some of the specific concerns of wireless carriers. This Guide provides background information, identifies key issues (such as routing calls, financial questions, and cooperating to designate a single point of contact), and offers suggestions to state and local governments for dealing with telecommunications carriers. The Guide has been distributed to agencies around the country; a copy is included herewith as Attachment 1.

Finally, the Department has been working with state departments of transportation to help establish a coalition of public and private entities that will develop national guidelines on key implementation issues. This resulted last October in the formation of the "511 Policy Committee" which has the general aim of fostering a strong working relationship between transportation agencies and the private sector companies that provide content, on one hand, and the telecommunications industry on the other.⁸ The 511 Policy Committee has already concluded that the traffic and roadway condition information that is available through 511 should meet minimum quality and consistency standards, so that accurate and reliable information is a hallmark of the 511 code. The

^{8/} The 511 Policy Committee is co-sponsored by DOT, the American Association of State Highway and Transportation Officials ("AASHTO"), which is comprised of representatives of the transportation departments of all fifty states, the American Public Transit Association (whose members are 420 public transit agencies and 951 businesses and other government agencies), and the Intelligent Transportation Society of America (whose members are 175 public transportation agencies, 355 private sector transportation companies, and 93 associations and universities). The U.S. Telephone Association and CTIA are also members. Attachment 2 hereto is a list of the members of the 511 Policy Committee.

committee is now in the process of drafting guidance for the implementation of 511 consistent with this objective. Not only will this directly assist travelers in making their decisions, but it will enhance the use and expansion of this important public resource in accord with DOT and FCC goals.

V. Conclusion

Properly implemented, the 511 traffic information service can benefit virtually every citizen virtually every day. The Commission has made the correct choice in leaving much leeway to government agencies and telecommunications providers in reaching agreement on the implementation of 511. The wireless communications industry has legitimate concerns about this important subject. However, there are many transportation structures and procedures in place that have generated a history of successful transport projects and information services, and there is no reason to suspect otherwise with respect to the use of this abbreviated dialing code.

A cooperative effort across diverse regions of the country will be required. The Department is committed to building on the good faith discussions that have already begun, and to making 511 a quality national service in cooperation with the telecommunications industry.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Thomas W. Herlihy", is written over the printed name.

THOMAS W. HERLIHY
Acting General Counsel



U.S. Department
of Transportation
**Federal Highway
Administration**

511

for

TRAVELER INFORMATION

Implementation Issues

August 14, 2000

Prepared By

**ITS Joint Program Office
US Department of Transportation**

511

Implementation Issues

I. Introduction

At least three hundred telephone numbers currently exist for traveler information systems in the United States. To overcome the confusion caused by this array of numbers, the United States Department of Transportation (USDOT) petitioned the Federal Communications Commission (FCC) for a national assignment of a single, easy-to-remember three-digit dialing code, N11. On July 21, 2000 the Federal Communications Commission assigned 511 as the nationwide telephone number for ITS traveler information.

The use of 511 for traveler information services will provide crucial benefits to the community. 511, it will allow the public an easy-to-remember number to access traveler information services. The result of this ease of access will be a major increase in the number of peoples using the service. The Northern Kentucky and Cincinnati area experience produced a 72% increase in calls when they implemented their "211" service in 1997. The increase in call volume will produce a public better informed about local travel conditions and, experience has shown that informed citizens make choices about when and how to travel; thus reducing congestion and resulting safety and other problems that are a result of congestion.

II Purpose

The purpose of this document is to provide State and Local transportation agencies with an explanation of the FCC action, some of its implications, and some key issues related to how a transportation agency would proceed to implement 511 for the region. Also discussed are potential involvement with telephone Local Exchange Carriers (LECs), wireless communications carriers, and state regulatory agencies such as the State Public Utilities Commissions (PUCs), State Commerce Commissions (SCCs), or State Public Service Commissions (PSCs).

III. The FCC Report and Order

There have been several petitions to the FCC requesting N11 number assignments for a variety of uses. In 1992, the FCC issued a Notice of Proposed Rulemaking concerning the assignment of N11 codes (CC Docket 92-105). In 1997, the FCC issued a First Report and Order and Further Notice of Proposed Rulemaking on N11 codes. In that Report and Order, the FCC assigned the number 711 for telecommunications relay services (TRS) and the number 311 for non-emergency police and state and local government services. The FCC also clarified the jurisdiction and numbering authority in this proceeding.

In the 1997 Report and Order, the FCC stated that although the FCC has exclusive jurisdiction over the North American Numbering Plan (NANP) in the United States, the Communications Act of 1996 also allows the Commission to delegate to State commissions or other entities all or any portion of such jurisdiction.

This FCC order implied that if a state regulatory agency performed any N11 assignment functions in the past, they may continue to do so in the future. Conversely, if the agencies did not address these assignments, they are not required to. That decision rests with the state agency and the authority given to them by the State Legislature. The importance of this statement is that the laws vary from state to state, and each transportation agency will have to determine if their respective State regulatory agency exercises any jurisdiction over the implementation of N11 numbers, and what specific requirements would have to be met.

The new Report and Order assigns the number 511 for Traveler Information. The FCC order will allow the number to be assigned only to government entities.

Transportation agencies are not obligated to use the number, and the Report and Order does not dictate which agency should request its use, or how it will be implemented or funded. These decisions are left to local governments.

Some local telephone companies may have been permitted to use unassigned N11 numbers for commercial purposes. Therefore, there is a possibility that 511 is currently in use in your area. The incumbent user does not have to vacate the number until it is requested for traveler information. The FCC order allows current users a reasonable time to vacate the number after an application is filed by a transportation agency.

IV. Key Issues in Obtaining the 511 Number

1. Introduction

The FCC delegated the authority to resolve implementation issues to state and local governments. Each state has different legislation concerning whether there is a state regulatory agency that has jurisdiction over assignment of the number, filing of tariffs, vacating services currently using the number, and resolving conflicts if competing requests are received for the number. The best method for implementing a system depends, in part, on the authority exercised by the state regulatory agencies.

There are various steps an agency can take to begin the process of implementing a 511 service. Based on information gathered from several state regulatory agencies and communications service providers, the following is a description of actions that can be taken and issues that should be addressed by transportation agencies desiring to implement this service.

The information provided in this section applies primarily to organizations that have an existing telephone-based traveler information system. These organizations have an

existing infrastructure to collect traveler information, a means of paying for the service, and telephone access to the system.

2. Suggested Actions for Transportation Agencies

a) Regional Cooperation is Essential

The 511 number will be available to state and local transportation agencies. The FCC order assumes that the telephone-based traveler information systems are multi-modal. They could include several categories of information such as real time traffic information, transit information, information on commuter rail, weather and construction. Prior to the assignment of the 511 number, each agency probably has a different telephone number for these services. With the 511 assignment, it is now possible that all transportation agencies in a given region will share the 511 number to make it easier for the traveling public to obtain information. To make a single number, 511, work, it will be essential that all agencies wishing to use the number cooperatively determine the exact implementation of the service.

You will have to deal with potentially both the state regulatory agency and the telecommunication carriers in your area. It is important that conflicts on who answers the call be resolved by the transportation agencies rather than a state regulatory agency. State regulatory agencies may get involved in conflicting requests for the assignment if the state law gives them jurisdiction. (See section "c" below) However, the telecommunications companies will not deal with conflicts among agencies. They will tell you to come back when you have all that straightened out .

Therefore, in order for any one agency to use 511, all agencies will have to cooperate to resolve a variety of issues, many of which are described below. Implementation of 511 may be frozen until the agencies can agree among themselves how the assignment should be made.

b) Designate a Single Point of Contact

A lead agency/person/ consortium should be designated (e.g. the State DOT or a Metropolitan Planning Commission, or a contractor as an agent for the public agencies, etc.) to deal with both the state regulatory agency and the telecommunications carriers in the region. (The local telephone companies are referred to as Local Exchange Carriers - LECs - as opposed to long distance carriers.) Communications carriers have a particular way of doing business and a somewhat unique terminology that they use. The carriers have stated that it greatly simplifies getting questions answered and issues resolved between the public sector agencies and the various service providers if there is a single point of contact with whom they can work. Since this is a multi-modal service, there are many agencies involved and a great potential for confusion without a lead agency and a specific project manager designated to work with the LEC and all the wireless carriers.

The agency or consortium that applies for the number will be the responsible party for filing materials with the state regulatory agency. In states where the regulatory agency will not exercise jurisdiction, the responsible party will be the one that places the request for service with the communications service providers. The communications service providers will be more cooperative if they are presented with a request from an agency that is addressing the ownership issue for all agencies.

Traveler information systems can be enhanced in terms of the types of information offered. This may involve having a new transportation agency join the system and provide information for distribution. For example, a system that provided traffic information may be approached by a transit agency desiring to make real-time transit information available to customers. A framework for adding new participants to the system should be developed to avoid conflicts between agencies desiring to use the 511 number.

Cooperation on the local, regional, and state level is essential to the success of the project. Form a framework for an organization that can equitably represent all potential participants and a procedure for adding new participants and expanding the service area in the future.

c) Contact the State Regulatory Agency

The FCC has the authority to make decisions pertaining to the use of telephone numbers in the North American Numbering Plan. The FCC can, and does delegate some responsibilities to state and local governments. Each state in turn has legislation that determines whether a state regulatory agency will perform any administrative functions concerning telephone numbers.

The designated lead agency/program manager should contact the state regulatory agency, Public Utilities Commission (PUC), or Public Service Commission (PSC), or other nomenclature, to determine if the state regulatory agency has jurisdiction over any facet of N11 number administration. In general, state regulatory agencies that have jurisdiction usually regulate only wireline telecommunications networks. Wireless telephone services such as cellular (e.g. Cellular One), enhanced specialized mobile radio services (ESMR) (e.g. Nextel), and Personal Communications Systems (PCS) (e.g. Sprint PCS) are normally not regulated by a state agency. (Dealing with wireless carriers is discussed later in paragraph f.)

Find out if the state regulatory agency should be petitioned, if a tariff has to be filed, and if there are any specific requirements the state agency will expect the petitioner to meet. Some state regulatory agencies may decide to issue a notice of inquiry, or may decide to develop a set of procedures for assignment of the number.

The states that have regulatory agencies that take administrative responsibility for implementing the use of N11 codes may decide to hold public hearings on the issues described in this paper as well as any others raised by the participants. They may also delay assignment of these numbers until they develop administrative procedures for applying and granting the use of an N11 number.

Some regulatory agencies will require that "tariffs" are filed, and in all likelihood, this will only be required of the LEC, not the wireless carriers. Tariffs are the schedule of rates that are charged for specific services. The carriers may decide to define 511 for traveler information as a new service and create a new rate structure.

Several states have no legislation giving the regulatory agency jurisdiction or administrative responsibilities concerning N11 numbers. These regulatory agencies are likely to tell the transportation agency applying for the use of the 511 number that the state does not exercise regulatory authority in this matter, and that all arrangements are between the communications carriers and the transportation agencies.

c) Who Will Answer the Call ? Decide How and Where to Route the Telephone Call

There are several issues related to the routing of a 511 call for traveler information. There are going to be situations where the call could be potentially routed to more than one logical location. For example, Columbia, Maryland is a city half way between Washington, DC and Baltimore, Maryland. Some residents work in one city and some work in the other. When they dial 511, which city will they get information from? Will it be the State? The solution to this issue will depend on regional cooperation. The agencies providing the services in both cities may have to jointly implement an automated call director that will forward the call to the proper city at the caller's prompt. This is only one potential solution.

LEC calling boundaries do not necessarily match up to political jurisdictions. Agencies that are charged on a per-call basis may have to accept calls that are routed from a switching center that serves residents from both within and outside of the desired service area. Also, the call may be considered by the carrier to be a toll call, and the carrier will need to know who to bill; the caller or the service provider. The implementing agency will have to work with the carrier to solve these routing issues.

The routing issue is simplified with wireless service providers. According to some of the service providers contacted as part of this study, they are able in most circumstances to be able to route calls from specific base stations (cell sites) to designated locations. They also often have what are known as sectorized base stations. These base stations have more than one directional antenna. When a base station is located near the edge of a desired service area, the antennas pointed toward the service area can route the call to the proper location, and the antennas pointed away from the service area can refuse the call.

The 511 number will be assigned to public transportation agencies only. No private company can apply or own the number. However, the transportation agency may allow a private company, or several companies, to operate the system for them. A number of metropolitan areas currently have public-private partnerships providing traveler information. This arrangement does not have to change if the transportation agency

decides to convert the number to 511. Further, these private service providers may be a major asset in organizing the region and dealing with the LECs.

d) Who Pays

A basic decision must be made regarding who pays for the 511 call. The FCC report does not require this to be a public service. Transportation agencies may choose to make this a free call to the public. However, agencies may also choose to have the caller pay a charge per call. This may be especially appropriate if there are means available to customize the information for a particular caller. Currently, there are some traveler information systems that are supported by revenues from advertising. Before you contact your telecommunications carriers, this issue should be decided. Don't forget, the public now pays for information from 411; they pay for 911. Who pays for 511 is your choice.

e) Use Competition and Leverage off Other Government Purchasing Power

Remember, 511 traveler information is *not* a public service required of the carriers. This will be revenue generating service for them - they will make money on 511. Further, if you now have a 7 or 10 digit traveler information number, when you implement 511 the call volume will increase. The Kentucky-Cincinnati experience showed the call volume doubled. This will impact what you pay and how much money the carrier could make.

State and Local Governments are often the largest single customers of the LEC's. There are existing contracts for service already in place and the Government, as a customer, may have considerable clout in dealing with the carriers, as well as having experienced people who are accustomed to negotiating with the carriers and setting up telecommunications systems. There may be existing contracts that transportation agencies can "piggyback" on. Transportation agencies can investigate what resources and clout the State and Local governments have to deal with the local carriers, and use these resources to try to obtain a lower cost for providing the service.

Competition among carriers, particularly the wireless carriers, can help reduce costs. Wireless carriers may decide to charge subscribers for airtime, as was the case in using 311 for non-emergency police service in Chicago. When 211 was implemented for traveler information in Cincinnati, one cellular carrier charged airtime and the other did not. After several months, the carrier charging for airtime decided that for competitive reasons, they should also make the call free. Charges by the carriers for 511 service should be considered negotiable, and transportation agencies should encourage competition, particularly between the wireless providers. Remember, there is now competition in the local exchange market. The Baby Bells are not the only game in town any longer.

f) Contacting the Carriers

Plan on approaching the LEC first. They will be the implementers of the service on fixed telephones. Some groups implementing 311 have had success in working with the LEC first, and having the LEC coordinate with the wireless carriers. There will be 2 analog cellular carriers in each service area, up to six PCS carriers, and one or more ESMR carriers that will have to implement the service for ubiquitous coverage. If the LEC is willing to approach the wireless carriers on behalf of the 511 applicant, implementation will be greatly simplified.

Some of these carriers may want to provide traveler information to their subscribers themselves. In fact there already may be competing services in your area. This is more likely to occur with the cellular/PCS carriers. For instance, if Sprint wants to provide this for their customers, all 511 calls from Sprint customers could be routed to their service. Indeed, the US DOT has been encouraging the provision of these services by the private sector. However, this is the decision of the local transportation agencies. Further, if an agency allows a carrier to provide the 511 service for their customers, the agency can insist on a certain quality of that service.

g) Sources of Funding and Cost Issues

Funding is an important issue for the telephone service providers. There are fixed and recurring costs associated with implementing a N11 number. The telephone companies will want to know how the system will be funded. They are very sensitive to the political issues surrounding the funding of 911 for emergency communications and the customer response to charges on their monthly bills for this service. They will be reluctant to participate in any funding mechanism that will either require any significant involvement on their part or will add separate line items to the subscriber's monthly bill.

For existing traveler information systems, the ITS program intends to provide some grant money to help pay for the non-recurring conversion costs to change from a seven or ten-digit number to the 511 number. This program was announced in the Federal Register on August 9, 2000.

There are also recurring costs that have to be paid for items such as leasing lines and charges for every call made to the system. Traveler information systems are eligible for many Federal aid transportation funding programs, including the National Highway System, the Surface Transportation Program, and the Congestion Mitigation and Air Quality (CMAQ) program. For example, some agencies have used CMAQ funds as well as state funds. In California, money from the Service Authority for Freeways and Expressways, the California Transportation Development Act, CMAQ funds, and the State Transit Assistance funds are all used to finance the traveler information system used in the San Francisco Bay Area.

The information does not have to be collected and distributed by a transportation agency. Several of the existing traveler information systems are based on real-time travel information collected and distributed by a private sector company. The transportation

agency can contract with a private sector provider to supply part or all of the service. Several of the existing traveler information services offered by a DOT use Federal and State funds to help pay private sector companies to collect and distribute information provided over the telephone-based system.

The cost of 511 service may be different than what agencies are currently paying for a 7 or 10 digit number. LECs may be required to file a tariff by the state regulatory agency, while the wireless carriers may not have to. Carriers may decide that this is a new service and may present prices that bear no resemblance to charges for other N11 services. If the charges are deemed unreasonable by the transportation agency, they can petition the state regulatory agency for assistance. If the regulatory agency claims they have no jurisdiction, the transportation agency may have to make a case to the state legislature.

In many instances, 511 numbers could be implemented simply by redirecting calls made to 511 to the old 7 or 10-digit number, and both numbers remain active. If the existing number was not a toll free number, there may be the additional issue of paying for toll charges if the 511 call is initiated within the region but is not considered a local call. This is an unfortunate result of switching centers and call routing being independent of political boundaries.

h) Participate in national discussions on traveler information services.

The FCC order has charged the US DOT to encourage a degree of uniformity across the country in what the traveling public can expect from N11. Uniformity of service for a nationwide system may be desired or expected by consumers even though it is implemented at the local level. Customers calling 511 from different locations in different states may, for example, expect to hear a similar greeting or list of menu options when dialing the service. They may also expect consistent terminology when information such as travel conditions, weather forecasts or transit schedules are provided.

The US DOT, in conjunction with ITS America and organizations of state and local governments, is initiating a dialog on the subject of uniformity. Plan on participating in forums and other efforts that will determine how to achieve this objective.

V. Conclusion

The FCC report and order leaves resolution of implementation issues to agencies at the state and local level. Each state has different laws concerning their level of involvement in assigning telephone numbers and filing tariffs. Therefore, the experiences that transportation agencies will have in setting up an 511-based traveler information service will differ from state to state, and there will be many lessons learned. It is hoped that this guide will assist in getting agencies started with the conversion from a 7 or 10 digit number to 511.

The ITS JPO will be generating additional information based on the experience of the early adopters of 511 to assist other state and local governments in implementing this service.

US DOT contacts are: Bill Jones at the ITS JPO; 202-366-2128, william.s.jones@fhwa.dot.gov , and Bob Rupert in the Office of Travel Management in the Operations Business Unit, FHWA, 202-366-2194, robert.rupert@fhwa.dot.gov.

The FCC order, this document, and other information on the implementation of 511 as it is developed, are posted on the ITS web site at www.its.gov

**National 511 Deployment Assistance and Coordination Program
Policy Committee**

Membership List

Elwyn Tinklenberg, Chair

Commissioner
Minnesota Department of Transportation
395 John Ireland Boulevard
Mailstop 100
Saint Paul, Minnesota 55155-1899
PH: 651-296-3000
Commissioner@dot.state.mn.us

Lawrence Yermack, Vice Chair

President
PB Farradyne
322 Tower Oaks Blvd.
Rockville, MD 20852
PH: 301-468-5568
Yermack@pbworld.com

Gregory Cook, Vice Chair

Executive Director
Ann Arbor Transportation Authority
2700 South Industrial Highway
Ann Arbor, MI 48104
PH: 734-677-3902
gcook@theride.org

Frances Banerjee

Los Angeles Department of
Transportation
City of Los Angeles
221 N. Figueroa Street
Suite 500
Los Angeles, CA 90012
PH: 213-580-1182
fbanerjee@dot.lacity.org

John Baniak

Executive Director
I-95 Corridor Coalition
77 Belmont Dr.
Sarasota Springs, NY 12866
PH: 518-584-4826 FAX: 518-584-4827
jbaniak@nycap.rr.com

**Philip Caruso (representing Steven
Gayle, ITE President)**

Deputy Executive Director
Institute of Transportation Engineers
1099 14th St. NW
Suite 300-W
Washington, DC 20005-3438
Ph: 202-289-0222
pcaruso@ite.org [after 3/5/01]

James Codell

Secretary
Kentucky Transportation Cabinet
State Office Building
501 High Street
Frankfurt, KY 40622
PH: 502-564-4890, FAX: 502-564-9540
Email: jcodell@mail.kytc.state.ky.us

Kathryn Condello

Vice President, Industry Operations
Cellular Telecommunications Industry
Association
1250 Connecticut Avenue
Washington, DC 20036
PH: 202-736-3235 FAX: 202-887-1629
Kcondello@ctia.org

Shirley DeLibero
President and CEO
Metropolitan Transit Authority of Harris
County
1201 Louisiana
P.O. Box 61429
Houston, TX 77208-1429
PH: 713-739-4832
sdelibero@ridemetro.org

Robert Denaro
Sr Vice President
Rand McNally and Company
8255 N. Central Park
Skokie, IL 60076-2970
PH: 847-329-6712 FAX: 847-329-6361
bdenaro@randmcnally.com

Ann Flemer [Rep. for Steve Heminger]
Metropolitan Transportation Commission
Deputy director of Operations
101 Eight Street
Oakland, CA 94607-4700
Ph: 510-817-3240
Email: aflemer@mtc.ca.gov

Norm Forshee
911 Coordinator
St. Clair County
101 South 1st Street
Belleville, Illinois 62220
Phone - (618) 277-7316
Fax - (618) 277-7668
nforshee911@norcom2000.com

Steven Gayle
Executive Director
Binghamton Metropolitan
Transportation Study
PO Box 1766, Government Plaza
44 Hawley St. 5th floor [for express mailings]
Binghamton, NY 13902-1766
Ph: 607-778-2443
sgayle@co.broome.ny.us

Robert Gibbons
Supervisor
Stafford County
PO Box 339
Stafford, VA 22554
(540) 658-8607
(540) 752-1936
rgibbons@co.stafford.va.us

Geoff Halstead
President & CEO
TrafficStation Inc.
800 Wilshire Boulevard
16th Floor
Los Angeles, CA 90017
PH: 213-929-2000 FAX: 213-929-2001
geoff@trafficstation.com

Honorable Chris Hart
County Commissioner
Hillsborough County
601 East Kennedy Blvd
PO Box 1110
Tampa, FL 33601
PH: 813-272-5725 FAX: 813-272-7052
Email: harc@hillsboroughcounty.org
Laurie: hutchenl@hillsboroughcounty.org

Steve Heminger
Executive Director
Metropolitan Transportation
Commission
101 Eighth Street
Oakland, CA 94607-4700
PH: 510-464-7700
Email: sheminger@mtc.ca.gov

George Heinrichs
President
SCC Communications Corp.
6285 S. Lookout Road
Boulder, CO 80301
PH: 303-581-5605 FAX: 303-581-0900
george@sccx.com

Dave Hensing

President
ITS America
400 Virginia Avenue SW
Washington, DC 20036
PH: 202-484-2890 FAX: 202-484-3483
Dhensing@itsa.org

Bob Hopkins

Managing Director of Administration
American Automobile Association
1000 AAA Drive
Heathrow, FL 32746
PH: 407-444-7660 FAX: 407-444-7380
rbhopkins@national.aaa.com

John Horsley

Executive Director
AASHTO
444 N. Capitol Street NW
Washington, DC 20001
PH: 202-624-5800 FAX: 202-624-5808
jhorsley@aashto.org

Henry Hungerbeeler

Director
Missouri Department of Transportation
105 West Capitol Avenue
P. O. Box 270
Jefferson City, Missouri 65102
PH: 573-751-4622, Fax: 573-526-5419
Email: hungeh@mail.modot.state.mo.us

David Jannetta

Executive Vice President
Traffic.com
951 Duportail Road, Suite 220
Wayne, PA 19087
Ph: 610-407-7410 Fax: 610-725-0847
djannetta@traffic.com

Christine Johnson

Director, ITS Joint Program Office
Federal Highway Administration
400 7th Street, SW, Room 3401
Washington, DC 20590
PH: 202-366-0408 FAX: 202-366-3302
Christine.johnson@fhwa.dot.gov

Karen Lamb

Director, Customer Services
Washington Metropolitan Area Transit
Authority
8405 Colesville Road, 5th Floor
Silver Spring, Maryland 20910
PH: 301-562-4690 FAX: 301-562-4675
Email: klamb@wmata.com

Norbert Lucash

Director, Technical Operations
United States Telecom Association
1401 H Street NW #600
Washington, DC 20005-2164
PH: 202-326-7297
Email: nlucash@usta.org

William Millar

President
American Public Transit Association
1201 New York Avenue
Washington, DC
PH: 202-898-4070
wmillar@apta.com

Jeff Paniati

Program Manager, ITS Joint Program
Office
Federal Highway Administration
400 7th Street, SW, Room 3401
Washington, DC 20590
PH: 202-366-9536 FAX: 202-366-3302
Jeff.paniati@fhwa.dot.gov

Mary Peters

Director
Arizona Department of Transportation
206 S. 17th Street
Phoenix, AZ 85007
PH: 602-712-7227
Email:

John D. Porcari

Secretary
Maryland Department of Transportation
10 Elm Road
P. O. Box 8755
BWI Airport, MD 21240-0755
PH: 410-865-1000, Fax: 410-865-1334
Email: jporcari@mdot.state.md.us

Edward Thomas

Associate Administrator for Research,
Demonstration and Innovation, TRI-1
Federal Transit Administration
400 Seventh Street, S.W.
Room 9401
Washington, DC 20590
Ph: 202-366-4052, Fax: 202-366-3765
Email: edward.thomas@fta.dot.gov

Harry Voccola

Senior Vice President
Navigation technologies
97 McCutchen Court
Middletown, NJ 07748
PH: 908-804-5495 FAX: 732-671-4349
voccola@navtech.com

Tom Warne

Executive Director
Chief Administrative Officer
Utah Department of Transportation
4501 S. 2700 West
Salt Lake City, Utah 84119
PH: 801-965-4027
Twarne@dot.state.ut.us

James Weinstein

Commissioner
New Jersey Department of
Transportation
1035 Parkway Ave.
Trenton, NJ 08625
PH: 609-530-3536, Fax: 609-530-3894
Email: jamesweinstein@dot.state.nj.us